PROCEEDINGS OF THE

ENTOMOLOGICAL SOCIETY OF WASHINGTON

VOL. 30 JANUARY, 1928 No. 1

NEW CACTUS BEETLES. II.1

By W. S. Fisher, U. S. Bureau of Entomology.

This is the second paper on the beetles received in connection with the prickly-pear insect investigations that are being conducted by the Commonwealth of Australia, at Uvalde, Texas. The specimens were sent for identifications by Leith F. Hitchcock, who is anxious to have names for these species to use in papers dealing with cactus insects. The species described in the present paper were collected in Mexico by E. Mortensen, and in the West Indies by Leith F. Hitchcock.

Moneilema (Collapteryx) opuntiae, n. sp.

Form small, elongate, moderately convex, vaguely ventricose; surface glabrous, nearly smooth, feebly shining, and uniformly black.

Head feebly, broadly depressed between the antennal tubercles, and with a narrow, longitudinal groove extending from the occiput to epistoma, but the groove more or less obsolete on the front, the surface rather densely, minutely punctate, with a few shallow, coarser punctures intermixed, and sparsely clothed with short, inconspicuous pubescence; clypeal suture vaguely impressed and abbreviated at the sides; labrum slightly reddish anteriorly. Antennae about two-thirds as long as the body, rather robust, and gradually tapering to the apex; first joint long, robust, truncate and widest at apex, and the surface minutely punctate; fourth joint feebly, broadly annulated with white pubescence at base.

Pronotum about one-fourth wider than long, the sides feebly expanded at the middle, more or less strongly constricted along the basal third, and without a distinct spine or tubercle; surface smooth, and without distinct punctures.

Elytra nearly twice as long as wide (male slightly shorter), oblong-oval, widest near middle, strongly convex, and the flanks rounded and not very abruptly deflexed; sides broadly rounded at humeral angles, and broadly subtruncate at the apex; surface vaguely ventricose, and without distinct punctures, except on the deflexed area near base, where the surface is coarsely punctate.

Abdomen beneath feebly convex, impunctate except the last segment which has a few coarse, obsolete punctures, and the surface sparsely clothed with very short, inconspicuous hairs; last segment entirely black, broadly, vaguely emarginate at the apex in the male, and broadly subtruncate in the female.

¹I. Proc. Ent. Soc. Wash., vol. 28, 1926, pp. 214-217.

Legs robust, more strongly expanded in the male, and the surface with a few scattered, coarse punctures; both sexes with the first three joints of the anterior tarsi spongy pubescent beneath; first joint of posterior tarsi spongy pubescent over almost the entire surface, the second and third joints densely so throughout, though divided by a fine line.

Length, male 10 mm., female 17 mm.; width, male 4.5 mm., female 7 mm.

Type locality.—San Luis Potosi, Mexico.

Type and allotype.—Cat. No. 40763, United States National Museum. Paratype returned to Mr. Leith F. Hitchock, of the Australian Prickly Pear Investigations at Uvalde, Texas.

Described from three specimens, female type and male allotype collected at the type locality on *Opuntia* sp., June, 1927, by E. Mortensen, and a female paratype collected at the same locality during May.

This species is allied to *mexicanum* Fisher and *crassa* LeConte, but differs from both these species by having the upper surface practically impunctate.

Moneilema (Collapteryx) rugosipennis, n. sp.

Form rather large, elongate, strongly convex; surface glabrous, strongly shining, and uniformly black.

Head rather deeply and broadly depressed between the antennal tubercles, and with a narrow longitudinal groove extending from the occiput to epistoma, and the surface glabrous, densely, minutely punctate, with a few coarser punctures intermixed; clypeal suture broadly depressed but not sharply indicated. Antennae about two-thirds as long as the body, rather robust, and gradually tapering to the apex; first joint long, robust, gradually expanded to the apex, which is truncate, and the surface minutely punctate, with a few coarser punctures intermixed; fourth and fifth joints more or less annulated with white pubescence at base, especially on the underside.

Pronotum at most only slightly wider than long, the sides sinuate anteriorly, feebly expanded at the middle, more or less strongly constricted along basal third, and armed with a short, more or less acute tooth at the middle; surface very minutely punctured, with a few irregularly placed, coarse punctures along the base and anterior margin.

Elytra twice as long as wide, oblong-oval, widest at middle, strongly convex, and the flanks rounded and not abruptly deflexed; sides broadly rounded at the humeral angles, and broadly, transversely subtruncate at the apex; coarsely, irregularly punctate over entire surface, the punctures denser toward the base, where the surface is also more or less coarsely rugose.

Abdomen feebly convex, and densely, minutely punctate; last segment entirely black, broadly, arcuately emarginate at the apex in the male, and broadly rounded in the female. Legs robust, more strongly expanded in the male, and the surface with a few scattered, coarse punctures; both sexes with the first three joints of the anterior tarsi spongy pubescent beneath; first joint of posterior tarsi without spongy pubescence, but the second and third joints

nearly covered with spongy pubescence beneath, though broadly divided at the middle.

Length, 15-30 mm.; width, 7-10 mm.

Type locality.—San Luis Potosi, Mexico.

Type, allotype and paratypes.—Cat. No. 40764, United States National Museum. Paratypes returned to Mr. Leith F. Hitchcock.

Described from a large series of specimens (one type), collected at the type locality during May and June, 1927, by E. Mortensen, who writes that the adults were plentiful at the type locality, mostly on *Opuntia imbricata*, but that they will also feed on *Platyopuntia* sp. These adults are covered with a light powdery bloom when collected, but this is usually lost by abrasion.

In the specimens examined scarcely any variations were observed except in size. The species is closely allied to *armata* LeConte, but differs from that species in having the elytra coarsely punctured over the entire surface and more or less rugose, and the second joint of the posterior tarsi spongy pubescent over nearly the entire surface, whereas in *armaua* the elytra are more sparsely punctured, the punctures only covering the basal two-thirds, and the second joint of the posterior tarsi has only a small spongy pubescent space on each side.

Moneilema (Moneilema) vittata, n. sp.

Form elongate, moderately convex, vaguely ventricose, black, feebly shining, and each elytron ornamented with a broad, distinct vitta of very short, white pubescence extending from the middle to apex.

Head feebly, broadly depressed between the antennal tubercles, and with a narrow, longitudinal groove extending from the occiput to epistoma, but becoming more obsolete on the front, the surface rather densely, minutely punctate, with a few coarser punctures toward the sides, and sparsely clothed with very short, inconspicuous pubescence; clypeal suture vaguely impressed and abbreviated at the sides. Antennae about two-thirds as long as the body, rather robust, and gradually tapering to the apex; first joint long, robust, acute externally at apex, and the surface densely, minutely punctate, with a few widely separated, coarser punctures intermixed; fourth joint broadly annulated with whitish pubescence at the base, and the third with more or less whitish pubescence on the underside.

Pronotum about one-fifth wider than long (slightly wider in the female), the sides feebly expanded at middle, strongly constricted along basal third, and without a spine or tubercle; surface smooth, with a few irregularly placed coarse punctures along the posterior margin in the male (finely, densely punctate, with a few irregularly placed, coarse punctures over entire surface in the female).

Elytra nearly twice as long as wide, oblong-oval, widest at middle, strongly convex, and the flanks rounded and not very abruptly deflexed; sides very broadly rounded at humeral angles, and broadly, transversely sinuate at apex (slightly more subtruncate in the female); surface rather sparsely, coarsely punctate on basal half, the punctures becoming obsolete on apical half (vaguely entricose in the female), and rather strongly scabrous on the deflexed area near base.

Abdomen feebly convex, smooth in the male, vaguely punctate in the female; last segment reddish posteriorly, broadly, arcuately emarginate at the apex in the male, and broadly subtruncate in the female; last dorsal segment slightly reddish. Legs smooth and not distinctly punctate, and the femora of the female much less inflated than in the male; both sexes with the first three joints of the anterior tarsi spongy pubescent beneath; first joint of the posterior tarsi slightly spongy pubescent at the sides apically, the second and third densely so throughout, though divided by a distinct line at the middle.

Length, male 20 mm., female 26 mm.; width, male 8 mm., female 10 mm.

Type locality.—Aquascalientes, Mexico.

Type and allotype.—Cat. No. 40765, United States National Museum.

Described from two specimens, male type and female allotype, collected at the type locality on *Opuntia* sp., May, 1925, by E. Mortensen.

This species is closely allied to appressa LeConte and nigriventris Fisher. From the former it differs in having each elytron ornamented with a broad vitta of white pubescence on the apical half, and the first joint of the posterior tarsi with a small spongy pubescent space at the apex. From nigriventris it differs in having the last ventral segment of the abdomen reddish at the apex, and the first joint of the posterior tarsi with spongy pubescent spaces.

Gerstaeckeria (Gerstaeckeria) elegans, n. sp.

Black (antennae missing), and clothed with white, black, and brownish scales.

Head with the front not sulcate, but the entire front and basal fourth of the beak densely clothed with creamy white scales, with a browner patch over each eye; beak long, shining, densely, coarsely punctate, and strongly, longitudinally carinate posteriorly; eyes acutely rounded above, and separated from each other by two-thirds of the width of the beak at base.

Pronotum vaguely wider than long, widest near middle, with the sides feebly arcuately expanded from base to near middle, then strongly narrowed to the apex; surface moderately convex, longitudinally carinate at the middle, coarsely, confluently punctate, and rather densely clothed with dark brown and blackish scales, with a few yellowish-white ones intermixed, especially along the anterior margin, the black scales forming a more or less distinct longitudinal zigzag vitta on each side of the middle. Scutellum invisible.

Elytra oval, distinctly wider at base than pronotum, and about one-third wider at basal fourth than pronotum at middle, strongly constricted at base, but without a posthumeral prominence; interspaces with the alternate ones slightly wider and more densely scaly; strial punctures large, subquadrate, rather deep, each bearing a single scale at middle, and separated from each other by partitions not so high as the interspaces; surface rather densely clothed with brownish black scales, with alternate spots of black and brownish yellow scales on the first, third, and fifth interspaces, and ornamented with a distinct, narrow, transverse white fascia just before the apical declivity, a short transverse fascia at basal fourth, extending from near the humeri to middle of each elytron, and with a narrow area of the same colored scales along the sutural margins on apical declivity.

Abdomen beneath coarsely, densely punctate, and clothed with whitish and dark brown scales intermixed; second, third, and fourth segments about subequal in length. Femora unarmed, and densely clothed with creamy white scales, with a few darker ones intermixed; tarsal claws rather long, and strongly divergent.

Length, 11.5 mm.; width, 5.5 mm.

Type locality.—San Luis Potosi, Mexico.

Type.—Cat. No. 40766, United States National Museum. Described from a single example collected at the type locality,

June, 1927, on Opuntia sp., by E. Mortensen.

This species belongs to the subgenus Gerstaeckeria, and is closely allied to alternata Pierce. It can, however, be separated from that species by the front of the head not being sulcate, the pronotum not constricted at the apex, and the sides more parallel posteriorly, the elytra distinctly wider than the pronotum at base, and the sides constricted at the base, and the scales on the legs of a more uniform color.

Gerstaeckeria (Philopuntia) unicolor, n. sp.

Black, with the antennae reddish brown, and clothed with blackish brown and slightly paler brown scales intermixed.

Head with the front slightly sulcate, and the entire front and basal fourth of the beak densely clothed with brownish white scales; beak long, moderately shining, coarsely, densely punctate, and rather strongly, longitudinally carinate posteriorly; eyes rounded above, acute beneath, and separated from each other by less than one-half of the width of beak at base.

Pronotum nearly one-third wider than long, widest at middle, with the sides regularly, arcuately rounded; surface moderately convex, coarsely, confluently punctate, and rather densely clothed with erect, blackish brown and paler brown scales intermixed. Scutellum invisible.

Elytra oval, not wider at base than pronotum, but about one-third wider at middle than pronotum at middle, and without a post-humeral prominence; interspaces narrower than striae, and the alternate ones not more densely scaly; strial punctures large, round, rather deep, each bearing a single scale

at middle, and separated from each other by partitions, which are subequal in height to the interspaces; surface rather densely clothed with erect, blackish brown and slightly paler brown scales intermixed, without forming any distinct design.

Abdomen beneath coarsely, densely punctate, and sparsely clothed with brownish white scales; second segment slightly longer than the third or fourth segments. Femora unarmed, and densely clothed with scales similar to those on the abdomen; tarsal claws rather long, and strongly divergent.

Length, 5.5 mm.; width, 2.75 mm.

Type locality.—San Luis Potosi, Mexico.

Type.—Cat. No. 40767, United States National Museum. Described from a single example collected at the type locality

on Opuntia sp., during 1927, by E. Mortensen.

This species belongs to the subgenus *Philopuntia* Pierce, and is allied to *porosa* LeConte, but can be easily distinguished from all the known species of this genus by the scales on the upper surface being erect, and of a nearly uniform color.

Gerstaeckeria (Philopuntia) insulana, n. sp.

Black, with the antennae piceous and densely pubescent; surface sparsely clothed with blackish scales, and ornamented with light brown and yellowish white scales.

Head with the front deeply depressed between the eyes, and the front and base of beak rather densely clothed with whitish scales, the scales becoming brown and less conspicuous on the occiput; beak long, shining, rather finely, sparsely punctate, and longitudinally carinate near the base; eyes rounded above, acute beneath, and separated from each other by about one-fourth of the width of the beak at base.

Pronotum only slightly wider than long, widest near the middle, feebly constricted along apical margin, and the sides arcuately rounded, but slightly more obliquely so posteriorly; surface coarsely, confluently punctate, more or less rugose, with a short, longitudinal carina at the middle, and sparsely clothed with inconspicuous black scales, with a few irregularly placed brownish yellow ones, which tend to form a median vitta in front and behind the median carina. Scutellum invisible.

Elytra oval, not wider at base than pronotum, but nearly one-third wider at middle than the width at median part of pronotum, and without a post-humeral prominence; interspaces wider than the striae, with the alternate ones more densely scaly; strial punctures large, round, moderately deep, each bearing a single scale at middle, and separated from each other anteriorly by partitions distinctly lower than the interspaces; surface (except on the alternate interspaces) sparsely clothed with inconspicuous blackish scales, with a few irregularly placed brownish yellow ones intermixed, and ornamented just in front of the apical declivity with a short vitta on the first, third, and fifth interspaces, composed of densely placed brownish yellow scales, with a few paler ones intermixed, and also with a few scattered scales of the same color on the alternate interspaces between the vitta.

Abdomen beneath rather densely, coarsely punctate, and rather densely clothed with uniformly colored brownish white scales; second, third, and fourth segments about subequal in length. Femora unarmed, and more or less mottled with piceous black and whitish scales, but the scales becoming denser and more yellowish white on the tibiae; tarsal claws rather short and approximate.

Length, 6.5-8 mm.; width, 3-4 mm.

Type locality.—Port-au-Prince, Haiti.

Type and paratypes.—Cat. No. 40768, United States National Museum. Paratypes returned to Mr. Leith F. Hitchcock.

Described from six specimens (one type), collected at the

type locality, January, 1927, by Leith F. Hitchcock.

This species belongs to the subgenus *Philopuntia* Pierce, and is allied to *porosa* LeConte. In *porosa*, however, the pronotum is more conspicuously clothed with whitish and yellowish scales, and is without a distinct smooth, longitudinal carina at the middle, the alternate interspaces of the elytra are not wider or more densely scaly, the striae are much wider than the interspaces, and the strial punctures are larger and subquadrate, the scales are more conspicuous and of a whitish color, and do not form distinct vittae on the first, third and fifth interspaces near the apical declivity, and the tarsal claws are long and strongly divergent.

Gerstaeckeria (Philopuntia) cubaecola, n. sp.

This species so closely resembles *insulana* Fisher that it is deemed necessary merely to give the differences:

Form more slender; pronotum with the brownish scales more uniformly distributed on the median part, and not forming a vitta in front and behind the median carina; elytra more sparsely scaly and the scales of a paler color, the alternate interspaces not wider or more densely scaly, the strial punctures very shallow, scarcely depressed on the disk, and the partitions separating them in the striae nearly subequal in height to the interspaces.

Length, 5.75-6.75 mm.; width, 2.8-3.25 mm.

Type locality.—Santiago, Cuba.

Type and paratype.—Cat. No. 40769, United States National Museum. Paratype returned to Mr. Leith F. Hitchcock.

Described from three specimens (one type), collected at the type locality, December 28, 1926, by Leith F. Hitchcock.